

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-335262

(43)Date of publication of application : 22.11.2002

(51)Int.Cl.

H04L 12/44

H04L 12/46

(21)Application number : 2001-139219

(71)Applicant : NEC CORP

(22)Date of filing : 09.05.2001

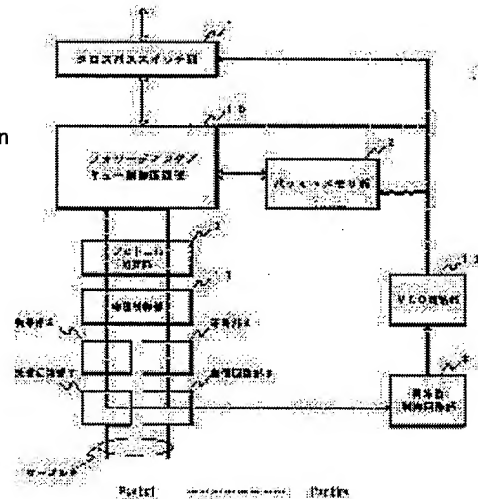
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## (54) SWITCHING HUB AND METHOD FOR ITS POWER-SAVING

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a switching hub that controls the operating frequency of its part circuitry to conduct supply of minimum supply of required current and heat generation control thereby reducing the running cost and noise and to provide a method for its power-saving.

**SOLUTION:** The switching hub is configured with a circuit section depending on number of ports such as a protocol processing section 3, a coding section 4, a decoding section 5, a transmission circuit section 6, a reception circuit section 7, and a physical control section 11; a common circuit section such as a cross bus switch section 1, a packet memory section 2 and a forwarding/ queue control circuit section 10, and a frequency control circuit section 8 and a VCO circuit section 12. The reception circuit section 7 discriminates the operating state of each port and allows the frequency control circuit section 8 to decrease the operating frequency supplied from the VCO circuit section 12 as its control when there exists ports not in use. Thus, the switching hub can be operated with required minimum power without waste, the power consumption can effectively be utilized, heat generation is reduced, EMI(electromagnetic interference) is decreased and the operation stable margin can be strengthened.



## LEGAL STATUS

[Date of request for examination]

17.04.2002

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3606226

[Date of registration]

15.10.2004

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]